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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,543	12/14/2005	Bernard Louis Dit Picard	20126 (429 PCT)	5041
31743 7590 06/14/2007 PATENT GROUP GA030-43 GEORGIA-PACIFIC LLC 133 PEACHTREE STREET, N.E. ATLANTA, GA 30303-1847			EXAMINER VANATTA, AMY B	
			ART UNIT 3765	PAPER NUMBER
			MAIL DATE 06/14/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/560,543

Applicant(s)

LOUIS DIT PICARD ET AL.

Examiner

Amy B. Vanatta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 26-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 121405.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 39-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 39 is rendered indefinite in that it is a device claim, however it is dependent on a process claim (one of claims 26-38). The claim is not accordance with standard US practice in that it appears to be drawn to more than one statutory class of invention, that is, both a method and an apparatus. The claim is indefinite since it appears be claiming both a method and an apparatus.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 26-36 and 39-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Sternlieb et al (2003/0101558).

Sternlieb et al disclose a process of hydroentangling a web including positioning the web on a porous support in translatory movement or rotating about an axis (see Figs. 1-3) and treating a side of the web with a plurality of streams of water (0019). The streams are arranged in a row perpendicular to the direction of movement of the web (see streams emerging from strip 30). The row comprises streams of a first cross section and streams of a second cross section different from the first cross section; see, e.g., Fig. 8 in which orifice 42 is smaller than orifice 43 since orifice 42 has straight walls 45 while orifice 43 has angled walls 46 which produce a larger opening. Also see Figs. 5-7 which illustrate orifices having a first cross section and orifices having a second cross section within the same row defined by strip 30. These orifices form perforations with different cross sections and are opposite a water distribution line as in claim 39. See paragraph 0021, disclosing that the size, number and/or orientation of the orifices may be varied; paragraph 0039 disclosing that the distances (spacing) between openings is varied; and paragraphs 0117 and 0123, disclosing that the orifices may be variably spaced and sized. Regarding claim 27, Fig. 7 depicts an embodiment in which two rows may be seen. That is, if an imaginary line were drawn through strip 30 from left to right dividing strip 30 into a top half and a bottom half (as viewed in Fig. 7), the top half contains orifices forming a first row and the bottom half contains orifices forming a second row. The rows contains streams of a first cross section and streams of a second cross section different from the first cross section and at least one row having streams of non-constant spacing (see, e.g., the streams in the upper row comprising angled streams on the left in Fig. 7, which are more closely spaced than either the

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streams in the middle or the streams on the right). The streams issuing from all of the orifices are from a common injector, as claimed. The streams in the second row (bottom half of strip as viewed in Fig. 7) include streams not in alignment with the streams of the first (upper) row (see, e.g., left hand portion of the strip in Fig. 7), and also streams in alignment therewith (see, e.g., group on the far right in Fig. 7), as in claims 31 and 32. The first (upper) row comprises streams in groups spaced at intervals from each other as in claims 31 and 32. The first (upper) row comprises streams of a first and a second cross section (see longer and shorter cross sections shown in the left, middle and right groups, in the upper region as viewed in Fig. 7), while the second row comprises streams of the second cross section (see longer and/or shorter cross sections shown in the left, middle and right groups, in the lower region as viewed in Fig. 7). Both sides of the web are treated (see, e.g. Fig. 3), as in claim 36.

5. Claims 39-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Coote (US 2002/0092931).

Coote discloses a device comprising perforations (see A,B,C in Fig. 1) which provide streams of water, the perforations being made in a strip (surface of spray tube shown in Fig. 1) positioned opposite a water distribution line (0010). The perforations are in a single strip and have different cross sections as in claim 39 (see cross sections indicated at A, B, and C in Fig. 1 and see paragraphs 0004, 0006, and 0009-0012). Coote discloses that the device may comprise more than one row of nozzles (as shown e.g. in Figs. 4 and 7) with more than one nozzle size (more than one row having more

than one nozzle shape/size is not depicted in the figures but is disclosed in paragraphs 0006, 0025, 0034, and 0036). By this disclosure, the first row includes perforations of a first cross-section (e.g. A) and the second row includes perforations of a second cross-section (e.g. B), thus meeting the limitations of claim 41.

Although Coote does not disclose the use of the device for hydroentangling a fibrous web according to the method of claims 26 to 38, it is noted that claims 39-41 are drawn to the device, and Coote does disclose the structure of the device. The device of Coote has a structure such that it is capable of treating a fibrous web by spraying it with water jets, and it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sternlieb et al (2003/0101558) in view of Sternlieb (US 5,737,813).

Sternlieb '558 discloses a method and apparatus as claimed, including hydroentangling a fibrous web by treating the web with streams of water jets. Sternlieb

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discloses that the fabric may be a nonwoven fabric (paragraph 0020) or woven fabric (0016, 0132). Sternlieb '558 does not disclose that the fabric web comprises cellulose fibers. Sternlieb '813 discloses a similar process of hydrojet treatment of a fabric web, and this patent discloses that the fabric which is treated in the method may comprise cotton, which inherently comprises cellulose (see, e.g., col. 2, lines 32-34). Sternlieb '913 teaches that particularly good results are obtained when such a fabric is treated with water jets (col. 2, lines 32-34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a fabric comprising cellulose (e.g. cotton) for treatment in the method of Sternlieb '558 since cotton (cellulose) containing fabrics are commonly treated by such methods and are known to produce good quality fabrics under such conditions, as disclosed by Sternlieb '813.

### ***Conclusion***

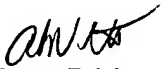
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy B. Vanatta whose telephone number is 571-272-4995. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Amy B Vanatta  
Primary Examiner  
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